





CURRICULUM VITAE ABREVIADO (CVA)

IMPORTANT – The Curriculum Vitae <u>cannot exceed 4 pages</u>. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

First name	Samuel		
Family name	Suárez Pantiga		
Gender (*)	Male	Birth date (dd/mm/yyyy)	
Social Security, Passport, ID number			
e-mail	svsuarez@ubu.es	URL Web	
Open Research and Contributor ID (ORCID)(*)		0000-0002-4249-7807	

(*) Mandatory

A.1. Current position

Position	Ramón y Cajal Researcher		
Initial date	1st January 2023		
Institution	Universidad de Burgos (UBU)		
Departament/Center	Chemistry Department		
Country	Spain	Teleph.	
		number	
Key words	Organic		
	Chemistry/Organometallics/Catalysis/organosulfur/nitrocompounds		

A.2. Previous positions (research activity interruptions, art. 45.2.c))

4.2. I revious positions (research activity interruptions, art. 45.2.c/)				
Period	Position/Institution/Country/Interruption cause			
2019-2022	Distinguished Researcher/University of Burgos/Spain			
2018-2019	Postdoctoral Researcher/University of Göttingen/Germany			
2016-2018	Postdoctoral Researcher/University of Burgos/Spain			
2014-2016	Postdoctoral Researcher/Stockholm University/Sweden			
2012-2013	Postdoctoral Researcher/University of Valencia/Spain			
2012	Postdoctoral Researcher/University of Valencia/Spain			
2010	Visiting Ph. D. Student/Boston College/ USA			
2007-2012	FPU Fellow Ph. D. Student/University of Oviedo/Spain			

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD	University of Oviedo/Spain	2012
Licensed	University of Oviedo/Spain	2006

Part B. CV SUMMARY (max. 5000 characters, including spaces)

Dr Suárez-Pantiga has developed a research portfolio focused on Synthetic Methodology at the forefront of modern organic and organometallic chemistry acquired from the different topics he has worked on, such as photochemistry, C-H bond functionalization, oxygen transfer reactions, organosulfur compounds, asymmetric catalysis, heterogeneous catalysis and biomass valorization. His research experience is outlined below. After initiating doctoral studies, in 2007, he was granted a FPU Fellowship by MEC to perform PhD studies under the supervision Profs. J.M. González and E. Rubio at the University of Oviedo. During this period, in 2010, he joined Prof. A. Hoveyda group (Boston College, USA) during a short stay and was also invited to attend the Eli Lilly 8th Annual European Drug Discovery Workshop on Medicinal Chemistry held in London (2010). In January 2012, he obtained his Ph.D. degree, and later in 2012, he joined Prof. G. Asensio (University of Valencia) as postdoctoral researcher. There,



he focused on homogeneous and heterogeneous gold catalysts to be applied to flow chemistry. Then, he continued his academic studies, joining Stockholm University (SU) at Mendoza research group (2014), where he worked on light or thermal cycloaddition reactions of organoaluminum reagents, ligand design and C-H bond functionalization. During this period. Dr. Suárez took part in the EXSELENT Berzelii Center on Porous Materials an initiative of VINNOVA and the Swedish Research Council, a consortium formed by SU, the Technical Research Institute of Sweden and 12 industrial partners. Dr. Suárez oversaw coordinating the research project Heterogenous catalysts for late-stage functionalization reactions between the research group at SU and its industrial partner AstraZeneca at Mölndal. The results obtained generated two international PCT patents, commercialized by KeyOrganics Ltd (UK). In 2016 Dr. Suárez-Pantiga moved to the University of Burgos (UBU) as postdoctoral researcher at Prof. R. Sanz group, where he combined research, co-supervision of Ms. C. and Ph. D. students and teaching. In October 2018, he joined Georg-August-University Göttingen (Germany), participating in the EU-funded research project Sulfosol (Prof. M. Alcarazo, ERCconsolidator grant) synthesizing and measuring optoelectronic properties of expanded helicenes. In fall 2019, he joined UBU back, where he got involved in studying the catalytic activity of dioxomolybdenum complexes and the synthesis of organosulfur compounds, among other topics. In 2022 He currently combines research, co-supervision of Ms. C. and Ph. D. Students and teaching. Additionally, he has participated in four disertation thesis as Ph. D. Dissertation Thesis Committee. Along his career, he has initiated significant new directions for research within his group, started new projects, shown the ability to mentor students working on these projects, and the ability to bring these projects to completion. It is a testament to his initiative and project management skills that he has led several projects from their intellectual roots all the way through to publication. The applicant consistently has applied his previous gained knowledge to solve and achieve his current research goals. In May 2020, he was funded as PI by "La Caixa" Foundation (CAIXA-UBU001, FluNitroPhos) with a research grant to develop highly efficient and selective fluorination methodologies.

In 2022 he was awarded with a Ramon y Cajal (RyC) contract, and since 2023 he is RyC researcher at UBU. Dr. Suarez authored 39 publications in scientific journals (36 since 2012, 30 since 2017 including 4 research articles and 1 review as corresponding author), achieving 758 citations and made over 40 contributions to scientific congress, 3 patentes filed including 2 international patents licensed to KeyOrganics UK. Several articles have received highlights from other authors see for example: *Synfacts* 2019, 15(04), 0400; *Synfacts* 2013, 9(2), 0174; *ChemCatChem* 2013, 5, 2149–2151; *Synfacts* 2018; 14(07): 0720; *Synfacts* 2018, 14(01), 0109; *Synfacts* 2021; 17(12), 1333; *Chemistry & Industry* 2021, 85 (10), pp.41-42; or in webpages like https://www.organic-chemistry.org/abstracts/lit6/335.shtm from organic chemistry portal. He has supervised a doctoral thesis and is currently supervising 1 PhD student (funded by a predoctoral Fellowship from Junta Castilla y León), 1 post-doc (funded by "Junta Castilla y León").

Indicadores Generales de calidad

a) Published JCR articles 40 b) (Q1: 32 research articles), c) h-index 14 Web of Science (14 Scopus), d) Total citations 766 (Scopus 799) e) citations per year = 51.07; f) Thesis supervised: 1 and another currently ongoing. g) 7 articles received a total of 10 highlights from other researchers (1 ChemCatChem., 1Chemistry and Industry 6 Synfacts, 1 www.chemistryviews.org and 1 https://www.organic-chemistry.org/)

Part C. RELEVANT MERITS (sorted by typology)

- **C.1. Publications** (10 most relevant, * denotes corresponding author)
- **1.** N. Velasco, C. Martínez-Núñez, M. A. Fernández-Rodríguez, R. Sanz, <u>S. Suárez-Pantiga</u>,* "NIS/HFIP-Mediated Synthesis of Indene-Based β-Iodoalkenyl Sulfides from Propargylic Sulfides" *Adv. Synth. Catal*, **2022**, *364*, 2932–2938.
- **2.** M. Solas, Presa, <u>S. Suárez-Pantiga</u>, R. Sanz,* "Asymmetric Gold(I)-Catalyzed Tandem Hydroarylation–Nazarov Cyclization: Enantioselective Access to Cyclopentenones" *Angew. Chem. Int. Ed.* **2022**, *61*, e202207406; *Angew. Chem.* **2022**, *134*, e202207406.



- **3.** N. Velasco, A. Suárez, F. Martínez, M. A. Fernández-Rodríguez, R. Sanz,* <u>S. Suárez-Pantiga</u>,*, "From Propargylic Alcohols to Substituted Thiochromenes: *gem*-Disubstituent Effect in Intramolecular Alkyne Iodo/hydroarylation", *J. Org. Chem.* **2021**, 86, 7078–7091.
- **4.** <u>S. Suárez-Pantiga</u>,* R. Hernández-Ruiz, C. Virumbrales, M. R. Pedrosa, R. Sanz,* "Reductive Molybdenum-Catalyzed Direct Amination of Boronic Acids with Nitro Compounds", *Angew. Chem. Int. Ed.*, **2019**, *58*, 2129–2133. **Hot Paper**. **Top Downloaded Paper** in *Angew. Chem. Int. Ed.*, **2018–2019**.
- **5.** M. Solas, <u>S. Suárez-Pantiga</u>, R. Sanz,* "Ethyl lactate as a renewable carbonyl source for the synthesis of diynones", *Green Chem.*, **2019**, *21*, 213–218.
- **6.** N. Velasco, C. Virumbrales, R. Sanz, <u>S. Suárez-Pantiga</u>,* M. A. Fernández-Rodríguez,* "General Synthesis of alkenyl Sulfides by Palladium-Catalyzed Thioetherification of Alkenyl Halides and Tosylates", *Org. Lett.*, **2018**, *20*, 2848–2852.
- **7.** J. T. Sarmiento, <u>S. Suárez-Pantiga</u>, A. Olmos, T. Varea,* G. Asensio,* "Silicalmmobilized NHC-Gold(I) Complexes: Versatile Catalysts for the Functionalization of Alkynes under Batch and Continuous Flow Conditions", *ACS Catal.*, **2017**, *10*, 7146–7155.
- **8.** J. Otero-Fraga, <u>S. Suárez-Pantiga</u>, M. Montesinos-Magraner, D. Rhein, A. Mendoza,* "Direct and Stereospecific [3+2] Synthesis of Pyrrolidines from Simple Unactivated Alkenes", *Angew. Chem. Int. Ed.*, **2017**, *56*, 12962–12966.
- **9.** <u>S. Suárez-Pantiga.</u> K. Colas, M. J. Johansson, A. Mendoza* "Scalable Synthesis of Piperazines Enabled by Visible-Light Irradiation and Aluminum Organometallics", *Angew. Chem. Int. Ed.*, **2015**, *54*, 14094–14098.
- **10.** <u>S. Suárez-Pantiga</u>, C. Hernández-Díaz, E. Rubio, J. M. González,* "Intermolecular [2+2] Reaction of N-Allenylsulfonamides with Vinylarenes: Enantioselective Gold(I)-Catalyzed Synthesis of Cyclobutane Derivatives" *Angew. Chem. Int. Ed.*, **2012**, *51*, 11552–11555. **VIP communication.**

C.2. Congress

Selected contribution to congresses meetings and symposiums

Title: Dioxomolybdenum catalyzed C-N bond-forming reactions in reductive amination reactions with nitrocompounds. Authors: <u>S. Suárez Pantiga</u>. Name of the conference: EuChemS 2022 ECC European Chemistry Symposium. Type of participation: Oral communication. City of event: Lisboa, Portugal. Date: 08/2022 Organising entity: European Chemistry Society and he Portuguese Chemical Society (SPQ) August-September 13-17, 2022.

Title: Enantioselective Gold(I)-catalyzed Synthesis of Cyclobutane Derivatives: Allene-ene Intermolecular [2+2] Cycloaddition Reaction. Authors: <u>S. Suárez Pantiga</u>, C. Hernández Díaz, E. Rubio, J. M. González. Name of the conference: VI International School on Organometallic Chemistry Marcial Moreno-Mañas. Type of participation: oral communication. City: Alicante, Spain. Date: 07/2013Organising entity: ORFEO-CINQA.

C.3. Research projects

Title of project/contract: Direct Fluorination of Nitrocompounds and Heteroaryl Phosphonium Salts: Synthesis of Fluorocompounds. (FluNitroPhos). **Funding Program, Project ref**.: Il Convocatoria Proyectos de Investigación en Ciencias de la Vida y de la Salud (CAIXA-UBU001). **Amount** (€): 85000. **Funding Entity**: LaCaixa Foundation. **Participants**: Universidad de Burgos. **Duration**, from May-2020 to May-2022. **Principal Investigators**: **Samuel Suárez-Pantiga**, Roberto Sanz.



Title of project/contract: Molydenum-catalyzed Valorization of Biomass Feedstocks" (MolyCaV). **Funding Program, Project ref**.: PDC2021-120825-C21. **Amount** (€): 109250. **Funding Entity**: Ministerio de Ciencia e Innovación. **Participants**: Universidad de Burgos. **Duration**, from January-2022 to December-2023. **Principal Investigator**: Roberto Sanz.

Title of project/contract: Sulfur-based solutions for the selective functionalization of organic substrates (SULFOSOL). **Funding Program, Project ref**.: European Research Council GRANT_NUMBER: 771295 **Amount** (€): 2000000. **Funding Entity**: EU (ERC) **Participants**: Georg-August Goettingen University. **Duration**, from May-2018 to June-2023. **Principal Investigator**: Manuel Alcarazo.

Title of project/contract: Nuevos Métodos en Síntesis. Aplicaciones en la Industria Farmaceútica y en la Valorización de Lignina y Biopolioles. **Funding Program, Project ref**.: Subvenciones del programa a proyectos de investigación cofinanciadas FEDER (BU076U16). **Amount** (€): 120000. **Funding Entity**: Junta de Castilla y León. **Participants**: U. Burgos. **Duration**, from March-2016 to June-2018. **Principal** Investigator: Roberto Sanz Díez.

Title of project/contract: Development of artificial systems for the activation of dioxygen and C-H bonds. **Funding Program, Project ref**.: Research Executive AgencyGRANT_NUMBER: 631159 **Amount** (€): 100000. **Funding Entity**: EU **Participants**: Stockholm University. **Duration**, from March-2014 to February-2018. **Principal Investigator**: Abraham Mendoza.

C.4. Contracts, technological or transfer merits

Contracts

1. Nuevas metodologías sintéticas para la preparación de hidroxitirosol. Funding Entity: Sistemas Biotecnología y Recursos Naturales / Banco de Santander y Fundación Universidad y Enseñanzas Superiores C.-L.. P. I.: Roberto Sanz Diez. 2018-P1Y. Amount: 12.000 €

Patents

- 1. International Patent Application No. WO 2018-EP71086 Pub. No. WO 2019025575 Authors A. Mendoza, E. Martínez de Castro, S. Suárez-Pantiga, Title: Processes for preparing complexes comprising rhodium(II) and carboxylate ligands, Publication Date: 07.02.2019; Applicant entity: STOCKHOLM UNIVERSITY HOLDING AB; Commercialized by KEYORGANICS LTD. UK. Designated states: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
- 2. International Patent Application No. PCT/GB2017/050214 Pub. No. WO/2017/12991 Authors A. Mendoza, S. Suárez-Pantiga, Title: PROCESSES FOR PREPARING STERICALLY CONGESTED DICARBOXYLIC ACID LIGANDS AND PRODUCTS THEREOF, Publication Date: 03.08.2017; Applicant entity: STOCKHOLM UNIVERSITY HOLDING AB; Designated states: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
- **3.** Spanish Patent Application No. P202330202 **Authors** R. Hernández-Ruiz, R. Sanz, <u>S. Suárez-Pantiga</u>, **Title**: Procedimiento de reducción de compuestos nitroaromáticos empleando g-terpineno como agente reductor,; **Applicant entity**: Universidad Burgos; **Designated states**: Spain.
- **4.** Spanish Patent Application No. P202330200 **Authors** R. Hernández-Ruiz, R. Sanz, <u>S. Suárez-Pantiga</u>, **Title**: Procedimiento de reducción de sulfóxidos orgánicos empleando monoterpenos cíclicos como agentes reductores,; **Applicant entity**: Universidad Burgos; **Designated states**: Spain.